PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/963,905

Filing Date: September 26, 2001

Applicant: T. Hagan et al.

Group Art: 3721

Examiner: Christopher Harmon

Title: HOUSING WITH FUNCTIONAL OVERMOLD

Attorney Docket: 0275D-000435

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal brief in support of an appeal from the March 12, 2004 final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32.

REAL PARTY IN INTEREST

Black & Decker Inc., being the assignee of the present application, is the real party in interest.

RELATED APPEALS & INTERFERENCES

To the best of Appellant's knowledge, no other appeals or interferences are pending which will directly affect or be directly affected by or have a bearing on the Board's decision in the present pending appeal.

STATUS OF THE CLAIMS

On March 31, 2004, Appellant appealed from the final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32. Claims 3, 16 through 28, 31 and 33 have been canceled.

A copy of the claims at issue is provided in attached Appendix A.

A copy of the Office Action mailed March 12, 2004 placing the present application under final rejection is provided in attached Appendix B.

A copy of U.S. Patent No. 5,738,177 to Schell et al. is provided in attached Appendix C.

A copy of U.S. Patent No. 5,692,574 to Terada is provided in attached Appendix D.

STATUS OF AMENDMENTS

No amendment to the claims has been filed or is pending subsequent to the entry of the final rejection.

SUMMARY OF THE INVENTION

The invention relates to the use of overmolding to form a seal and/or vibration damper for sealing or damping the transmission of vibrations between the housing of a power tool and a second structure that is assembled to the housing.

With reference to Figure 2, an exemplary power tool 10 is illustrated to include a housing 12 that includes an end cap 30. With reference to Figures 3 through 5, the end cap 30 includes an end cap shell 100 and an overmold member 102. The end cap shell 100 is molded from a rigid plastic material, such as ABS, and the overmold member 102 is formed from a resilient material, such as a thermoplastic elastomer, that is molded onto the end cap shell 100 in a manner that simultaneously forms the overmold member 102 and couples it to the end cap shell 100.

The overmold member 102 includes a plurality of bumper members 170, a pair of isolators 172 and a linking member 174. Each of the bumper members 170 extends through the end cap shell 100 and terminates outwardly of the outer surface of the end cap shell 100 thus providing the end cap 30 with a degree of resiliency and shock absorption that may reduce the likelihood of damage to the housing 12 should the power tool 10 be dropped.

The isolators 172 are formed on the interior surface 154 of the end cap shell 100 and include an annular member 180 that extends forwardly of the interior surface 154. The isolators 172 are configured to engage the outer diameter 14a and the rear surface 14b of the housing 14c of the motor assembly 14 in a manner that maintains the rear surface 14b of the housing 14c in a predetermined location and which reduces or dampens the transmission of vibrations between the motor assembly 14 and the end cap shell 100.

The linking member 174 is fixedly coupled to each of the bumper members 170 and the isolators 172. The linking member 174 provides a flow path through which the resilient material flows during the formation of the bumper members 170 and the isolators 172. The linking member 174 also interconnects the bumper members 170 and the isolators 172, thereby rendering their removal from the end cap shell 100 more difficult.

Figures 10 and 11 illustrate another embodiment of the invention where the isolators 172 extend around the perimeter of a portion of the end cap cavity 104 and sealingly contact the rear surface 14b of the motor 14d. The isolators 172 seal the interface between the end cap shell 100 and the motor assembly 14, while the bumper members 170 seal the rear apertures 144 in the end cap shell 100. The space 188 defined by the isolators 172 may be filled with grease or another suitable lubricant, which lubricates a motor armature bearing 190.

ISSUES

Appellants present the following issue for review:

Whether or not Claims 1, 9, 30 and 32 are unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,738,177 to Schell et al.

Whether or not Claims 1, 2, 4 through 15, 29, 30 and 32 are unpatentable under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 5,692,574 to Terada.

GROUPING OF THE CLAIMS

Claims 1, 2, 4 through 8, 29 and 30 stand or fall together and Claims 9 through 15 and 32 stand or fall together. The reasons why Appellant believes the two groups of claims to be separately patentable are explained below in the Arguments.

BACKGROUND OF THE INVENTION

Applicant notes that several of the rejections do not appear to be based on structures that can be characterized as being an "overmold" or an "overmold portion". Applicant notes that overmolding is known in the art as molding a plastic material, usually (but not always) a rubber-like elastomer, over a rigid substrate. Accordingly, one of ordinary skill in the art will understand from Applicant's disclosure that the terms "overmold" and "overmold portion" refer to a component that has been formed by molding and cohesively (and substantially permanently) attached to a rigid substrate.

Appellant notes that while overmolding has been used in conjunction with the housings for power tools, the overmold has typically been employed on the exterior of the housing, usually in the area of a pistol-gripped handle, to improve the ability of the handle to be gripped by the operator of the power tool. Consequently, in situations where it was desirable to dampen vibrations and/or form a seal between the housing and another structure the prior power tools would employ discrete isolators and seals, thereby increasing the part count (and the overall cost) of the power tool.

Appellant's solution to this problem is to extend the overmold to an interior portion of the housing to thereby co-form the isolator and/or seal with the remainder of the overmold, thereby decreasing the part count and the overall cost of the power tool.

ARGUMENTS

Rejections Based On U.S. Patent No. 5,738,177 to Schell et al.

Applicant notes that the Examiner has stated in the above-referenced final rejection (copy attached in Appendix B) that:

> Schell et al. disclose a production assembly tool comprising a first structure 34 and a second structure 18, the first structure having a overmold portion 14 and structural portion 12. The overmold portion 14 is made from a resilient material/elastomer (neoprene rubber) and contacts the second structure 42 effectively dampening vibrations and stresses; see figures (1B and 19). Schell et al. disclose bumper member 76 for abutting the second structure 18 and limiting movement. Linking members 86 link the bumper and the overmold 14.

The Examiner's comments with respect to the Schell et al. reference (copy provided in Appendix C) appear to be directed only to the dampening of vibrations and stresses, which relates to Claims 9 and 32, and as such, do not

appear to be relevant to the subject matter of Claims 1 and 30, which concerns the use of an overmold to form a seal. Additionally, Appellant notes that the overmold (14) of the Schell et al. reference does not contact the transmission (42) (i.e., the component that the Examiner has identified as being the "second structure") at any point. Accordingly, the overmold (14) of the Schell et al. does not dampen vibrations between any portion of the housing (12) and the transmission (42) and does not form a seal between the housing (12) and the transmission (42).

It is well settled that "the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office." *In re Skinner*, 2 USPQ 2d 1788, 1788-89 (B.P.A.I. 1986). If the examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent. *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992).

In *W.L. Gore & Associates v. Garlock, Inc.*, the Federal Circuit stated that "anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). It is not enough, however, that the reference disclose all the claimed elements in isolation. Rather, as stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention "*arranged as in the claim*". *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

Anticipation, however, may reside even if the prior art reference relied on does not expressly disclose a minor aspect of the claimed invention. Under the principles of inherency, if a structure in the prior art necessarily functions in accordance with the limitations of a process or method claim of an application, the claim is anticipated. *In re King*, 801 F.2d 1324, 231 USPQ 136, 138 (Fed. Cir. 1986). The Federal Circuit has stated:

> To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill. *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ 2d 1746, 1749 (Fed. Cir. 1991).

In this regard, the CCPA has added that "'[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient.'" *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981) (quoting *Hansgirg v. Kemmer*, 102 F.2d 212, 214, 40 USPQ 665, 667 (C.C.P.A. 1939) (emphasis in original).

In view of the above, Applicant respectfully submits that the Examiner has not presented a prima facie case of anticipation. In this regard, the '177 patent to Schell et al. does not teach or suggest each and every limitation of Claims 1, 9, 30 and 32 and moreover, the Examiner cannot rely on inherency to fill in the gaps, as inherency "may not be established by probabilities or possibilities" as noted above. Accordingly, '177 patent to Schell et al. is not "a single prior art reference that discloses each element of the claim under consideration" and as such, the Examiner's rejection of Claims 1, 9, 30 and 32 under 35 U.S.C. §102(b) cannot stand.

Rejections Based On U.S. Patent No. 5,692,574 to Terada

Applicant notes that the Examiner has stated in the above-referenced final rejection (copy attached in Appendix B) that:

> Terada discloses a portable power tool comprising a motor housing structure and a secondary structure 5; see figure 1B. The housing structure further comprises three molded portions 3a-3c. Overmold portion 30 is molded to fit on an exterior surface of projection 15 extending from housing portion 3c. Overmold portion 30 forms a seal with housing portion 3c and secondary structure 5. Overmold portion 30 is rubber suited to dampen vibrations between the housing structure 3 and secondary structure 5.
>
> Terada does not directly disclose an overmold portion which is permanently and fixedly coupled to the structural portion, however the examiner takes OFFICIAL NOTICE that permanent coupling would have been obvious to one of ordinary skill in the art at the time the invention was made in order to insure a seal between the components.

A copy of the Terada reference is provided in Appendix D.

Appellant notes that the rubber ring (30) of the Terada reference is not formed by overmolding and moreover is not substantially permanently affixed to the housing (3). The '574 patent to Terada employs a discrete and independently formed rubber ring (30) that is not molded onto or permanently attached to anything. The rubber ring (30) is assembled onto, rather than cohesively attached to, a cylindrical projection (15) that is formed on a rearmost body section (3c) - see, Col. 5, lines 34 through 36 of the '574 patent to Terada: "[when] the rubber ring 30 is mounted around the projection...". (emphasis added). Moreover, the rubber ring (30) includes an inwardly opening groove (e.g., groove 33 in Figures 3A & 3B, groove 41 in Figure 4A) that extends about the outer periphery of the projection (15). If the rubber ring (30) were to be overmolded as alleged by the Office, the inwardly opening groove (33,41) could not be formed.

In view of the above, Appellant respectfully submits that the Office has not presented a *prima facie* case of obviousness. The establishment of a *prima facie* case of obviousness requires that three basic criteria be met: 1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, 2) that there must be a reasonable expectation of success, and 3) that the prior art reference or references must teach or suggest all the claim limitations. *See, e.g., In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on an applicant's disclosure. *Id.*

Regarding the suggestion or motivation to modify the drill of the Terada reference, Appellant further notes that the Patent Law draws a distinction between trade-offs and motivation to combine: trade-offs often concern what is feasible, not what is necessarily desirable, whereas motivation to combine requires the latter. *See, e.g., Winner International Royalty Corp. v. Wang*, 2002 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), *cert. denied*, 530 U.S. 1238 (2000).

In the instant case, the Examiner argues that "permanent coupling [of the rubber ring 30 of the Terada reference] would have been obvious to one of ordinary skill in the art at the time the invention was made in order to insure a seal between the components." The Terada reference, however, is not concerned with the sealing of the handle (5) to the housing (3) but rather with the attenuation of vibration. Accordingly, it appears that the motivation for the

modification is impermissibly found in Appellant's disclosure. Furthermore, Applicant notes that the rubber ring (30) of the Terada reference is subject to wear and is thus replaceable. Consequently, the modification that has been proposed by the Examiner (i.e., permanent attachment of the rubber ring (30) to the housing (3)) is a trade-off rather than the requisite motivation-to-combine, since it concerns what may be feasible rather than what is necessarily desirable.

With specific regard to Claims 1, 2, 4 through 8, 29 and 30, which include limitations wherein an overmold member is employed to form a seal between a housing and another structure, Appellant notes that the Terada reference does not describe the rubber ring (30) as sealing the handle (5) to the housing (3) and moreover, Appellant submits that sealing engagement of the handle (5) to the housing (3) would reduce or negate the vibration absorbing characteristics of the rubber ring (30). As such, Appellant submits there is no motivation to modify the Terada reference as proposed by the Examiner.

Additionally, Appellant further submits that the Examiner has not established a reasonable expectation of success or that the modified Terada reference will teach or suggest all the claim limitations. In this regard, it appears that the Examiner concludes that as the rubber ring (30) is made of a resilient material, it must seal against the handle (5). Appellant notes, however, that Terada is concerned with vibration absorption, which is accomplished through frictional engagement of the rubber ring (30) to the handle (5). Appellant notes, too, that frictional engagement does not necessarily equate to sealing engagement as the latter is highly dependent upon the load (force) that is applied

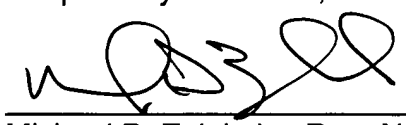
to a seal, the surface finishes of the components that are being sealed, etc. As noted above, "'[i]nherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient.'" *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (C.C.P.A. 1981) (quoting *Hansgirg v. Kemmer*, 102 F.2d 212, 214, 40 USPQ 665, 667 (C.C.P.A. 1939) (emphasis in original). Consequently, the Examiner cannot rely on inherency to support the rejection since he cannot show that the "missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill" in the art.

In view of the above, Applicant submits that permanent coupling of the rubber ring (30) to the housing (3) of the Terada drill would not have been obvious to one of ordinary skill in the art for purposes of either vibration attenuation or sealing and as such, Applicant respectfully submits that the Examiner has not presented a prima facie case of obviousness. In this regard, there is no motivation or suggestion to modify the drill of the Terada reference in the manner proposed by the Examiner to arrive at the subject matter of Claims 1, 2, 4 through 15, 29, 30 and 32. Additionally, the proposed modification lacks a reasonable expectation of success and does not teach or suggest each and every limitation of Claims 1, 2, 4 through 8, 29 and 30. As such, the Examiner's rejection of Claims 1, 2, 4 through 15, 29, 30 and 32 under 35 U.S.C. §103(a) cannot stand.

CONCLUSION

Appellant respectfully submits that the Examiner has not presented a *prima facie* case of anticipation or obviousness. Accordingly, reversal of the final rejection of Claims 1, 2, 4 through 15, 29, 30 and 32 is respectfully requested.

Respectfully submitted,



Michael D. Zalobsky, Reg. No. 45,512
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield, Michigan 48303
(248) 641-1600

Date: April 26, 2004

Appendix A: Claims At Issue

1. (Previously Amended) A portable power tool comprising a housing structure and a secondary structure that are fixedly but removably coupled to one another, the housing structure at least partially housing at least one of a motor assembly, a transmission assembly and a clutch assembly, one of the housing structure and the secondary structure having a structural molded portion and an overmold portion that is formed from a resilient material and molded onto at least a portion of the molded portion such that the overmold portion is permanently and fixedly coupled to the structural molded portion, the overmold portion defining a seal portion that is configured to engage the other one of the housing structure and the secondary structure to form a seal between the molded portion and the other one of the housing structure and the secondary structure when the housing structure and the secondary structure are coupled to one another.

2. (Previously Amended) The portable power tool of Claim 1, wherein the one of the housing structure and the secondary structure is an end cap.

3. (Canceled)

4. (Previously Amended) The portable power tool of Claim 1, wherein the resilient material is a vibration dampening material that is configured to attenuate vibrations that are transmitted between the housing structure and the secondary structure.

5. (Previously Amended) The portable power tool of Claim 4, wherein the resilient material is a thermoplastic elastomer.

6. (Previously Amended) The portable power tool of Claim 1, wherein the overmold portion further includes a bumper member that is coupled to an exterior surface of the molded portion, the bumper member being configured to abut the other one of the housing structure and the secondary structure to limit movement of the other one of the housing structure and the secondary structure relative to the molded portion in a predetermined direction.

7. (Previously Amended) The portable power tool of Claim 6, wherein the bumper member is raised from the exterior surface of the molded portion but otherwise conforms to the shape of the molded portion in an area in which the bumper member and the other one of the housing structure and the secondary structure abut.

8. (Previously Amended) The portable power tool of Claim 6, wherein the overmold portion includes a linking member that couples the seal portion to the bumper member.

9. (Previously Amended) A portable power tool comprising a first structure and a second structure, the first structure at least partially housing at least one of a motor assembly, a transmission assembly and a clutch assembly, at least one of the first and second structures having a structural portion and an overmold portion that is formed from a resilient material and at least partially molded onto the structural portion so as to be permanently fixedly coupled thereto, the overmold portion defining an isolator portion that is configured to contact the other one of the first and second structures and dampen vibrations that are transmitted between the structural portion and the other one of the first and second structures.

10. (Previously Amended) The portable power tool of Claim 9, wherein the first structure is an end cap shell and the second structure is a motor that is associated with the motor assembly.

11. (Previously Amended) The portable power tool of Claim 9, wherein the overmold portion also retains the other one of the first and second structures in a predetermined location relative to the structural portion.

12. (Previously Amended) The portable power tool of Claim 9, wherein the resilient material is a thermoplastic elastomer.

13. (Previously Amended) The portable power tool of Claim 9, wherein the overmold portion further includes a bumper member that is coupled to an exterior surface of the structural portion, the bumper member being configured to abut the other one of the first and second structures to limit movement of the other one of the first and second structures relative to the structural portion in a predetermined direction.

14. (Previously Amended) The portable power tool of Claim 13, wherein the overmold portion includes a linking member that couples the isolator portion to the bumper member.

15. (Previously Amended) The portable power tool of Claim 13, wherein the bumper member is raised from the exterior surface of the structural portion but otherwise conforms to the shape of the structural portion in an area in which the bumper member and the other one of the first and second structures abut.

16 through 28. (Canceled)

29. (Previously Added) The portable power tool of Claim 1, wherein at least one threaded fastener is employed to secure the housing structure to one of the secondary structure and a tertiary structure to thereby fixedly couple the housing structure and the secondary structure to one another.

30. (Previously Amended) A portable power tool comprising:

a power train having a motor assembly and a transmission assembly;

a first structure in which at least a portion of the power train is disposed; and

a second structure that is fixedly but removably coupled to the first structure to at least partially closing the first structure;

wherein the first structure includes a structural portion and an overmold portion, the overmold portion being formed from a resilient thermoplastic material that is molded onto the structural portion so as to be substantially permanently fixedly coupled thereto, the overmold portion defining a seal that sealingly engages at least one of the power train and the second structure.

31. (Canceled)

32. (Previously Amended) A portable power tool comprising:

a power train having a motor assembly and a transmission assembly;

a first structure in which at least a portion of the power train is disposed; and

a second structure that is fixedly but removably coupled to the first structure to at least partially closing the first structure;

wherein the first structure includes a structural portion and an overmold portion, the structural portion having an exterior surface and an interior surface, the overmold portion being formed from a resilient thermoplastic material and being disposed on at least a portion of both the exterior and interior surfaces of the structural portion, the overmold portion being substantially permanently fixedly coupled to the structural portion, the overmold portion defining an isolator that extends from the interior surface of the structural portion and dampens vibrations transmitted between the power train and the structural portion.

33. (Canceled)

Final O/A
Due 6-12-04

Office Action Summary

Application No.	Applicant(s)	
09/963,905	HAGAN ET AL.	
Examiner	**Art Unit**	
Christopher R Harmon	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-15,29,30 and 32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-15,29,30 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,905	09/26/2001	Todd A. Hagan	0275D-000435	9433

27572 7590 03/12/2004

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER	
HARMON, CHRISTOPHER R	
ART UNIT	**PAPER NUMBER**
3721	

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Schell et al. (US 5,738,177).

Schell et al. disclose a production assembly tool comprising a first structure 34 and a second structure 18, the first structure having a overmold portion 14 and structural portion 12. The overmold portion 14 is made from a resilient material/elastomer (neoprene rubber) and contacts the second structure 42 effectively dampening vibrations and stresses; see figures (1B and 19). Schell et al. disclose bumper member 76 for abuting the second structure 18 and limiting movement. Linking members 86 link the bumper 76 and overmold 14.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-2, 4-15, 29-30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terada (US 5,692,574).

Terada discloses a portable power tool comprising a motor housing structure 3 and a secondary structure 5; see figure 1B. The housing structure further comprises three molded portions 3a-3c. Overmold portion 30 is molded to fit on an exterior surface of projection 15 extending from housing portion 3c. Overmold portion 30 forms a seal with housing portion 3c and secondary structure 5. Overmold portion 30 is rubber suited to dampen vibrations between the housing structure 3 and secondary structure 5.

Terada does not directly disclose an overmold portion which is permanently and fixedly coupled to the structural portion, however the examiner takes OFFICIAL NOTICE that permanent coupling would have been obvious to one of ordinary skill in the art at the time the invention was made in order to insure a seal between components. Note also that the ring 30 of Terada is irregularly shaped to prevent sliding/misalignment; see figures 2a and 2b.

Regarding claim 2, secondary structure 5 is an end cap consisting of a handle.

Regarding claims 6-8, overmold portion 30 is a bumper member linked by a smaller diameter portion/groove 31 to seal portion/raised lip/isolator portion; see figure 2B.

Regarding claims 13-15, secondary structure 5 has stop member 21 extending therefrom which couples with bumper member 30; see figures 3A and 3B. Overmold portion 30 conforms to the shape of the secondary structure 5 and is raised from the exterior surface (see figure 3B).

Response to Arguments

5. Applicant's arguments filed 2/3/04 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., overmold portion contacting the transmission) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The overmold portion of Schell further includes a separate linking member and bumper member (screw and O-ring). Applicant seems to be arguing that they are not integral members of the overmold portion yet does not clearly set forth how the claimed invention distinguishes over the separate members. The screw and O-ring members of Schell are necessary to the construction and operation of the invention and are considered elements of the overmold portion.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R Harmon whose telephone number is 703-308-8643. The examiner can normally be reached on Monday-Thursday from 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ch

EUGENE KIM
PRIMARY EXAMINER

HDP/SB/21 based on PTO/SB/21 (08-00)

Please type a plus sign (+) inside this box → ☐

OTP E 2185
APR 2 6 2004
PATENT & TRADEMARK OFFICE

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/963,905
Filing Date	September 26, 2001
First Named Inventor	T. Hagan, et al.
Group Art Unit	3721
Examiner Name	Christopher Harmon
Total Number of Pages in This Submission	
Attorney Docket Number	0275D-000435

ENCLOSURES *(check all that apply)*

- ☒ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment / Response
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Assignment Papers *(for an Application)*
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) ____
- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☒ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)*
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) *(please identify below)*:
  return receipt postcard

Remarks: **The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 02-2548. A duplicate copy of this sheet is enclosed.**

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm *or* Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name Michael D. Zalobsky	Reg. No. 45,512
Signature			
Date	April 26, 2004		

CERTIFICATE OF MAILING/TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service as express mail in an envelope addressed to: Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date indicated below.

Typed or printed name	Claudia J. Richard	Express Mail Label No.	EV 406 076 670 US
Signature		Date	April 26, 2004

EV 406 076 670 US

4-27-04

IFW

AF/3721

PTO/SB/17 (01-03)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 330

Complete if Known	
Application Number	09/963,905
Filing Date	September 26, 2001
First Named Inventor	T. Hagan, et al.
Examiner Name	Christopher Harmon
Group / Art Unit	3721
Attorney Docket No.	0275D-000435

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 02-2548

Deposit Account Name: Black & Decker (U.S.) Inc.

The Commissioner is authorized to: *(check all that apply)*

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, **except for the filing fee** to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filling fee	

SUBTOTAL (1) ($) 0

2. EXTRA CLAIM FEES

			Extra Claims		Fee from below		Fee Paid
Total Claims		-20 **	= 0	X		=	0
Independent Claims		-3 **	= 0	X		=	0
Multiple Dependent				X		=	0

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive – unavoidable	
1453	1,330	2453	665	Petition to revive – unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
				Other fee (specify) _____	

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 330

SUBMITTED BY

Complete *(if applicable)*

Name (Print/Type)	Michael D. Zalobsky	*Registration No. Attorney/Agent*	45,512	*Telephone*	248-641-1600
Signature				*Date*	April 26, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.